

SAGEBRUSH CONSERVATION DESIGN

Information Sheet



What is the Sagebrush Conservation Design?

The Sagebrush Conservation Design (SCD) identifies the best remaining ecologically intact sagebrush areas. The SCD is an adaptive, biome-wide tool to identify and address landscape-level threats by supporting the strategic allocation of conservation effort and resources. These threats include invasive annual grass, wildfire, expanding conifers, and human development, all of which impact a diverse suite of land uses, values, and ecosystem services ranging from wildlife habitats to livestock forage and carbon storage.

The SCD will be updated bi-annually and will allow the tracking of conservation outcomes and the trajectory of the ecosystem.

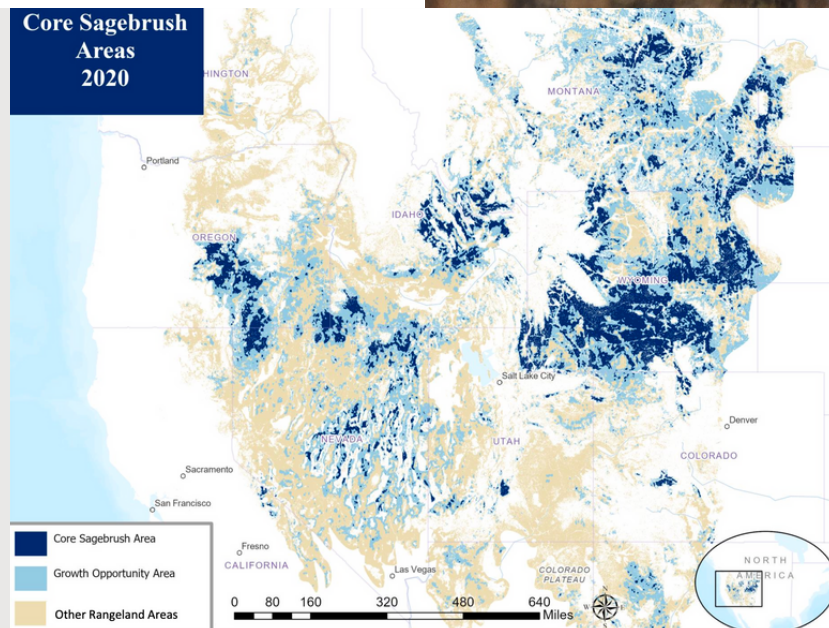
Why was the Sagebrush Conservation Design created?

- It focuses on large natural areas in order to benefit: fish and wildlife species, healthy land, air, and water, as well as working ranches.
- In addition to the important work being done by conservation groups and agencies, there is a need for a more diverse coalition, including private landowners, to change the trajectory of sagebrush rangelands.
- Of the major threats identified for sagebrush rangelands, 75% are ecosystem problems like invasive annual grasses and fire. These problems impact, and can bring together, diverse stakeholders including conservation groups and ranchers.



GENERAL FACTS ABOUT SAGEBRUSH

- Sagebrush was the most widespread vegetation type in western North America, covering portions of 13 U.S. States and spanning one third of the continental United States.
- Sagebrush is vital habitat for more than 350 species of plants and wildlife of conservation concern.
- The sagebrush biome has been reduced to half its original size and most remaining areas are impacted by threats.



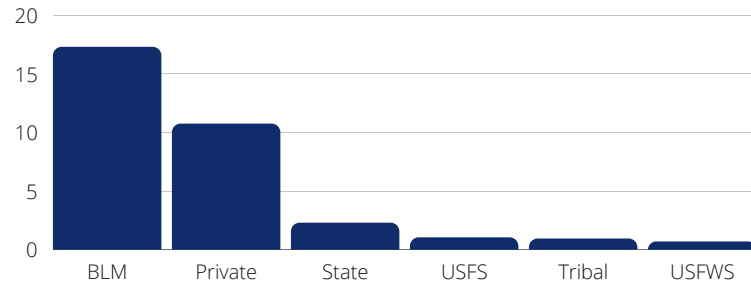


The Sagebrush Conservation Design focuses on first protecting intact and functioning sagebrush ecosystems, called Core Sagebrush Areas, then works outward towards more degraded areas called Growth Opportunity Areas and Other Rangeland Areas. This will be accomplished through strategic management and restoration of Core Sagebrush Areas and Growth Opportunity Areas, rather than initially starting with the most degraded areas where actions are more costly and less effective.

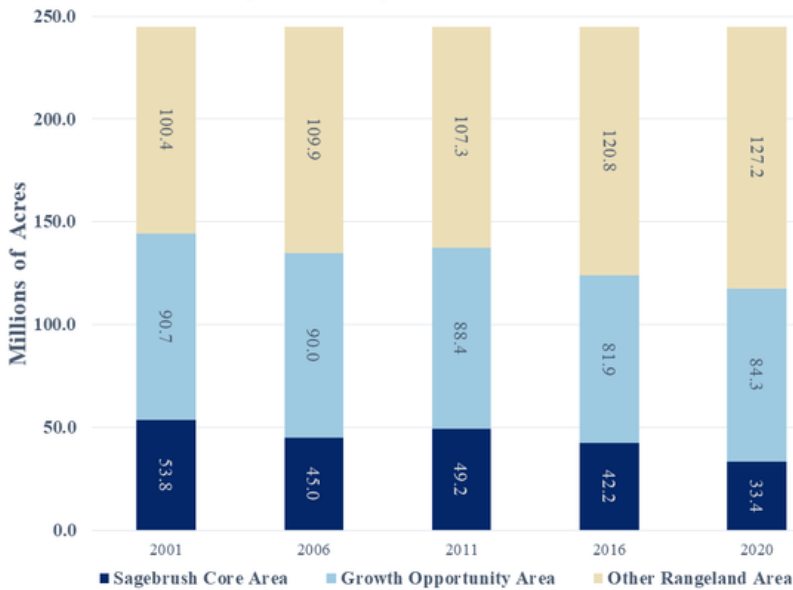
The SCD found that 1.3 million acres are transitioning each year from largely intact sagebrush sites to Other Rangeland Areas, underscoring the need for a strategic, landscape-scale approach.

The SCD supports a biome-wide conservation strategy and should be considered an adaptive and complimentary management tool to inform management decisions as they relate to sagebrush habitat across the West.

Core Sagebrush Area Management in Millions of Acres



Change in Core Sagebrush Areas 2001 - 2020



TOP THREATS TO SAGEBRUSH HABITAT

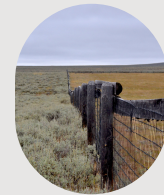
Invasive annual grass



Conifer expansion



Habitat loss & fragmentation



Enhanced fire cycle



INTENDED USES OF THE SCD

- The SCD can facilitate conversations about shared values and goals, setting quantitative objectives, monitoring success in achieving objectives, and developing strategies to meet shared goals at biome-wide and state scales.
- The SCD can identify areas for strategic investments to address major threats to the sagebrush biome.
- The SCD can be used in conjunction with other management prioritization tools, such as those for greater sage-grouse, to help develop comprehensive landscape-scale strategies.
- The SCD provides a framework for assessing the long-term impact of stressors like climate change on sagebrush ecological integrity and wildlife habitats as well as the relative improvements resulting from conservation investments.
- The SCD is not intended to prescribe specific tactics within localized areas. Local stakeholder input, knowledge, and higher resolution data should be used.

View the full report and learn more:

Doherty, K., Theobald, D.M., Bradford, J.B., Wiechman, L.A., Bedrosian, G., Boyd, C.S., Cahill, M., Coates, P.S., Creutzburg, M.K., Crist, M.R., Finn, S.P., Kumar, A.V., Littlefield, C.E., Maestas, J.D., Prentice, K.L., Prochazka, B.G., Remington, T.E., Sparklin, W.D., Tull, J.C., Wurtzebach, Z., and Zeller, K.A., 2022, A sagebrush conservation design to proactively restore America's sagebrush biome: U.S. Geological Survey Open-File Report 2022-1081, 38 p.

Report: <https://doi.org/10.3133/ofr20221081>

Download Data: <https://doi.org/10.5066/P94Y5CDV>

View Data: <https://gs-portal-fws.hub.arcgis.com/pages/sagebrush>